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ABSTRACT

This literature review focuses on the problem of lack of student motivation to learn. The purposes of this review are described as an exploration of factors that influence classroom motivation and suggestions of strategies for promoting students' desire to learn. Annotations are provided in these areas: student/teacher interaction and classroom climate; extrinsic versus intrinsic rewards; goals structure and goal setting; self-esteem; and attribution retraining. The studies mentioned in the annotations are discussed in a summary section. The report provides these conclusions: (1) classroom climate and teacher interaction with students is crucial in creating the needed socio-emotional climate to help maximize student achievement and motivation; (2) learning is enhanced if motivation is internal although reinforcers may be used; (3) cooperative and individualistic goals are more likely to increase motivation since they decrease interpersonal competition and increase intrapersonal competition; (4) individuals who believe in their own competence will be more persistent, have an internal locus of control, and attribute their successes to ability and their failures to lack of effort; and (5) attribution retraining by emphasizing a student's personal causation in learning should be a major objective in motivation. A glossary is included. (ABL)

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LEADING STUDENTS TO OPTIMAL PERFORMANCE THROUGH MOTIVATION

BY

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INTRODUCTION

Learning is active. It takes conscious effort; therefore, motivation is important. Young children have a natural intrinsic motivation to learn new things. They are always questioning and experimenting (Stipek, 1988, p. ix). Why is it then that by the time many of them reach the third grade, they are already becoming disenchanted with school learning, already apathetic and indifferent? Why are they no longer motivated to learn? Covington and Beery (1976) believe that self-esteem is one of the most important aspects in dealing with motivational problems (1976). Other researchers indicate that teachers' attitudes, expectations, and beliefs regarding intellence also greatly influence a student's motivation. There is no single reason or solution to motivational problems. Although teachers may realize the seriousness of the situation, they may not be prepared to correct it.

STATEMENT OF THE PROBLEM

Lack of student motivation to learn has long been a problem for teachers, and they often have little knowledge or preparation to handle the situation. Motivation is a part of every classroom activity and must be faced every day. Teachers need to have new insights and strategies

available to them in order to improve student interest in learning. Those students who are apathetic, disruptive, disinterested, or underachieving are often the ones who drop out of school because of unresolved academic or motivational problems. Sixty percent of today's high school students do not have adequate support at home, and more than twenty-five percent nationwide drop out of school due to unresolved academic and motivational problems. Ultimately it is the teachers who carry the greatest burden of responsibility (Grossnickle & Thiel, 1988, p.4). Schools today are under a great deal of pressure to turn out achieving pupils. Society pressures administrators; administrators pressure teachers, and teachers in turn pressure students to perform. The classroom becomes a place of tension and teacher control as teachers try to force learning even though research shows that the more control and pressure issued by the teacher the less learning takes place (Elkind in Ryan, 1985, pp. 30-31).

PURPOSE OF THE STUDY

Motivational problems are many and varied and all inhibit optimal learning. In the fact of massive negative reactions of students toward school as well as pressures by educators, politicians, and parents for higher achievement; teachers need to foster and maintain an atmosphere of motivation and enthusiasm to learn in the classroom. This study explores factors that influence classroom motivation and suggests strategies for promoting students' desire to learn.

ORGANIZATION OF THE STUDY

The annotations which comprise this paper are arranged under six general categories and in alphabetical order in each category. All of the concepts are closely related and many pertain to more that one category. The categories are: student/teacher interaction and classroom climate, extrinsic vs. intrinsic rewards, goals structure and goal setting, self-esteem, and attribution retraining. Conclusions and strategies are presented to assist teachers in developing students interested in learning for intrinsic reasons.

LIMITATIONS OF THE STUDY

This study is by no means all inclusive. There are many motivation theories, problems, and strategies not mentioned in this paper. I have researched six broad categories and related them to some of the more recent cognitive theories of motivation. From this information I have listed some strategies I believe will be helpful to teachers interested in improving students motivation to learn.

ANNOTATIONS

STUDENT/TEACHER INTERACTIONS - CLASSROOM CLIMATE

Brophy, J., Rohrkemper, M., Rashid, H., and Goldberger, M. Relationships between teachers' presentations of classroom tasks and students' engagement in those tasks. Journal of Educational Psychology, 1983, 75, 544-552. Brophy and constituents studied the relationship between the teacher's presentation of a task and the students' engagement in the task. Teacher presentation data and student engagement data (3 codes - yes, probably, or no) were observed 5 and 15 minutes into the task and recorded. Reading and math lessons for 4th, 5th, and 6th graders were used for the study. The relationships between task-presentation codes and student-engagement codes for 6 teachers based on correlations of the presence or absence of codes for 18 teacher categories with the percent of students in the class who were attentive or not revealed that student engagement was higher with no presentation statement. Positive statements showed no tendency for increased student engagement while negative statements showed lower student engagement. Possible reasons for findings were discussed.

Corno, L., and Mandinach, E. B. Using existing classroom data to explore relationships in a theoretical model of academic motivation. Journal of Educational Research, 1983, 77, 33-41. Relationships between verbal ability, internality, self-esteem, academic performance and the nature of the class group were studied, using available classroom data, to test a theoretical model of motivation. The subjects were third grade students in reading groups studying with a trained teacher or parent assisted. Reading comprehension was measured by standardized tests, and student self-appraisal measures were obtained. Students with higher self-esteem were expected to have higher verbal ability and to internalize their successes and failures. The average ability of the class was expected to influence individual students ability, attributions, and self-esteem and their relationship to each other. Results were in line with expectations.

Dweck, C. S. Motivational processes affecting learning. American Psychologist, 1986, 41, 1040-1048. Based on recent social-cognitive research, Dweck described two motivational patterns, one adaptive and one maladaptive. These patterns depended upon whether the child believed intelligence to be fixed or incremental. She created a model which indicated that a child's view of intelligence would lead to the pursuit of particular goals which in turn would influence how well a child acquired new knowledge, how well s/he used existing knowledge, and how well new skills and knowledge were transferred to new situations. Dweck determined that motivational processes could influence the use and growth of innate ability. She also discussed learning experiences such as teacher expectancy and teacher view of intelligence, that aided or fostered adaptive patterns of motivation.

Grossnickle, D.R., and Thiel, W. B. Theories of Motivation. Reston, Virginia: National Association of Secondary School Principals, 1988. This booklet explained motivational problems and current motivational strategies in the classroom today. A "systems" model to promote a motivating school and classroom was presented. Several chapters dealt with prevention of problems, interventions, and resolution of problems.

Mandler, G., and Sarason, S. B. A study of anxiety and learning. Journal of Abnormal and Social Psychology, 1952, 47, 1966-1973. The relation of anxiety states to performance and learning was tested by 154 university students. They were first given an anxiety questionnaire to determine attitudes toward test situations. The highest and the lowest anxiety subjects were chosen. During a testing situation subjects were interrupted with an intervening comment that indicated their efforts to be either successful, failing, or neutral. Results indicated that the scores of the low-anxiety group were better at first; but as testing proceeded, the anxiety drive of the high-anxiety group improved their performance. The intervening report of success, failure, or no information improved performance for the low-anxiety subjects but depressed scores for the high anxiety group. Optimal conditions for the high-anxiety group was no further reference to testing. Optimal for the low-anxiety was a failure report. It was determined that anxiety was an important variable in testing situations with regard to performance.

Meyer, W.-U., Indirect communications about perceived ability estimates. Journal of Educational Psychology, 1982, 74, 888-897. This article examined several studies of teacher evaluative behavior such as praise, blame, pity, anger, helping, or neglect and determined that certain behaviors considered to be positive could give negative feedback to the recipient. Other behaviors, considered to be negative, could give positive feedback to the recipient concerning his or her perceived ability. From the evidence presented, it was suggested that a person's perception of his ability and self-esteem may be influenced by his perception of the behavior of others concerning past performances.

Napier, J. D., and Riley, J. P. Relationship between affective determinants and achievement in science for 17 year-olds. National Association for Research in Science Teaching, 1985, 22, 365-383. The purpose of this study was to discover the relationships between certain affective determinants and achievement. Affective determinants included attitude, interests, and students' perceptions of instruction. 3135 seventeen-year-olds took the National Assessment of Educational Progress Survey containing affective items related to attitudes toward science and science teaching. Questions determined science enjoyment, self-concept, student choice, teacher support, teacher enthusiasm, usefulness of the class, and student motivation. The study showed that classes which foster achievement have the following characteristics: teacher encourages extracurricular course work which is not too difficult; students are comfortable and happy in class; teacher avoids too much latitude in student choice of topics, sequencing, mode of learning rate, and timing of tests; teacher encourages opinions, thinking for self and creativity; teacher takes a personal interest in students.

Richards, H. C. , and Bear, G. G. Attitudes toward school subjects of academically unpredictable elementary school children. Resources in Education, 1986, ED 269168. The hypothesis that an apathetic attitude and lack of interest in school subjects leads to low achievement and negative views of school in under- and overachievers was tested in this study and compared to an earlier study (Richards, Gaver & Golicz, 1984). The 1984 study dealt with middle class fourth-graders. This research dealt with boys and girls from a rural country West Virginia school. The children were mostly lower class fourth-, fifth-, and sixth-graders. Attitudes in math, reading, and science were measured. SRA Educational Ability Series and end-of-the-year grades were used in ability assessment. Results showed that underachievers had negative attitudes toward school subjects while overachievers had a positive attitude. It was believed that the difference in the results for over-achievers was probably due to demographic makeup. The lower-class rural community was more relaxed and overachievers were more self-motivated.

Richards, H. C., Gaver, D., and Golicz, H. Academically unpredictable school children: their attitudes toward school subjects. Journal of educational psychology, 1984, 77, 273-276. It was assumed in this study that children whose performance was below that predicted by standardized tests would have poorer attitudes toward school subjects. To test this assumption 43 fourth-graders were given the Estes Attitude Scales which measured feelings about math, reading, and science. Grades in these same subjects were obtained from their teachers. Children were placed in groups according to predicted and actual performance, and attitudes were examined. The original assumption was supported except for extreme under- and overachievers who also had poor attitudes. Pressure beyond their cognitive maturity probably led to loss of intrinsic interest.

Sadker, D. Dimensions of the elementary school environment: a factor analytic study. Journal of educational research, 1973, 66, 441-443. This study identified and measured the dimensions of the elementary school environment. Questionnaires covering 80 descriptive statements about the activities and nature of schools were responded to by 5412 students. Such topics as alienation, humanism, autonomy, morale, opportunism, and resources were identified. Since learning is defined as an individual interacting with the environment, this study was considered as an initial step to understanding the learning process.

Wlodkowski, R. J. Motivation and Teaching: A Practical Guide. Washington, C. D.: Education Association of the United States, 1986. This is a very straightforward and useful book about motivation and teaching. Motivational factors are diagnosed and discussed and practical suggestions for teachers are given. Various theories of motivation are explained and research articles are reviewed.

EXTRINSIC VS. INTRINSIC REWARDS

Brophy, J. Conceptualizing student motivation. Educational Psychologist. 1983, 18, 200-215. Brophy discussed a different way of seeing motivation. It was a mental state, a type of flow experience free from anxiety, fear of failure and extrinsic reward. The value of both quantitative and qualitative motivation were reviewed. His "motivation to learn" was divided into four categories based on the student's objectives for learning: Task exogenous/performance focused based on the use of rewards and incentives, task exogenous/value focused based on some goal beyond school, task endogenous/performance focused based on pride of mastering a skill, and task endogenous/value focused based on the joy of learning something new. Guidelines and suggestions were given for moving students from negative to positive motivation.

Brophy, J. Teacher praise: a functional analysis. Review of Educational Research. 1981, 51, 5-32. This article analyzed six studies to determine the actual function of teacher praise. Brophy indicated that praise can have other functions other than reinforcement of student conduct and academic achievement. He claimed that teacher praise is often not intended as reinforcement and is under the control of other variables such as student need or behavior. He stated that infrequent but contingent praise is valuable as a reinforcer but that teachers must be aware of how students respond individually to praise in order to determine its value as such.

Clair, M. S., and Snyder, C. R. Effects of instructor delivered sequential evaluative feedback upon students' subsequent classroom-related performance and instructor ratings. Journal of Educational Psychology. 1979, 71, 50-51. Clair and Snyder studied the repercussions of instructors giving various types of evaluative feedback upon students' subsequent performance and ratings of the instructor. It was postulated that experimentally manipulated student expectancies, established by the instructor giving evaluative feedback based on past performance, would result in a change on the next task. Feedback was either uniformly positive, uniformly negative, negative to positive, or positive to negative. College students, divided into each of the above categories, were given false evaluative feedback on the first task. After the second task the uniformly positive group had the greatest number of students with increased performance and positive instructor ratings followed by the negative-to-positive group, the positive-to-negative group, and the uniformly negative group.

Csikszentmihalyi, M. The experience of freedom in daily life. American Journal of Community Psychology. 1980, 8, 401-414. The relationship of challenges and skills to optimal experience was studied. Workers carried beepers for one week. At random times a signal was sent, and workers recorded the following: location, activity, thoughts and internal states, and challenges present in terms of skills. "Flow" was determined by means of individual mean scores on two dependent variables: affect and activation. Results showed that the level of perceived challenges and skills can be measured in everyday activities and the ratio between the two is an important component in the quality of life.

Csikszentmihalyi, M. Toward a psychology of optimal experience. Review of Personality and Social Psychology. Ed. Ladd Wheeler. Beverly Hills, California: Sage Publications, 1982, 13-36. The author discussed his studies and those of others on the optimal or "flow" experience. Its importance lay in the fact that what was most important to each individual was how he felt more than what he did. The "flow" experience was described as a type of intrinsic motivation that occurred when ones skills were equal to the challenge of the action. The activity presented constant challenges that exactly met the skills of the actor who became completely involved in the activity. The characteristics and importance of this type of intrinsic motivation were explained.

Hammer, B. Grade expectations, differential teacher comments and student performance. Journal of Educational Psychology. 1972, 63, 454-458. This study attempted to determine how teachers' comments concerning performance and expectations for future performance would affect future performance. Eighty-seven undergraduate physics students were given a regular objective exam. Students were requested to predict their grades before the exam was seen. Exams were graded numerically but treated differentially: with no comment, with a specified comment (good, etc.), with a specified comment and grade expectation for the next exam. The effects were judged by the next exam and the results correlated with the Rotter Internal/External Control Scale which was also administered. Students receiving a specified comment with expectation for the next exam scored better on the next exam than students who received only a specified comment. Students who received only a specified comment scored better than students who received no comment.

Lepper, M. R., and Gilovich, T. Accentuating the positive: eliciting generalized compliance from children through activity-oriented requests. Journal of Personality and Social Psychology. 1982, 42, 248-259. This study investigated the affect of undertaking mundane activities as games rather than chores. Preschool children were asked to pick up a large number of blocks and place them on shelves. The children were divided into three groups (goal setting, fantasy strategy, and control with no strategy). The fantasy group showed significant increase in compliance and enjoyment with the goal-setting group higher than the control group. Later requests by adults showed increased compliance by the children with goal or fantasy instruction.

Masters, J. C., Furman, W., and Barden, R. C. Effects of achievement standards, tangible rewards and self-dispensed achievement evaluations on childrens' task mastery. Child Development. 1977, 48, 217-224. Masters, Furman, and Barden wanted to determine what effect achievement standards, tangible rewards and self-dispensed achievement evaluations had on learning. Two studies were conducted with preschool children. The subjects were given a learning task and their performance had to meet certain standards (low, medium, or high). There was also an accelerated condition in which the children had to surpass all previous trials. In one group the rewards were tokens which could be exchanged for gifts. The second group of children administered their own rewards with self-praise. In both groups learning was significantly more rapid in high and accelerated standards. Self-dispensed rewards led to such rapid mastery that effects due to different standards disappeared. Results showed that standards were the primary determinant in learning.

Nuttin, J. R. Pleasure and reward in motivation and learning. Pleasure, Reward, Preference. Ed. D. Berlyn. New York: Academic Press, 1973. This was an investigation demonstrating "causality pleasure" with mastery and competence as motivators. Five-year-olds were observed playing with two machines. The onset of lights on one machine was programmed by the experimenter. The onset of lights on the other machine was caused by the children. The children were free to use either machine, and pleasure was judged by the time spent on the machine, verbal reports of each machine, plus observations. Children strongly preferred the machine which let them be responsible for their own actions. Self-attributions led to increased positive self-esteem, increased probability of using the machine again, and increased "liking". Perceived internal causation led to positive affects of competence and pride which led to trying the machine again.

Stipek, D. J. Motivation to Learn. New Jersey: Prentice Hall, 1988. The cognitive theories of motivation were explained as well as their potential application inside and outside of the classroom. The advantages and disadvantages of certain common classroom procedures were discussed in order to give teachers information with regard to achieving a motivational atmosphere which would promote an intrinsic desire to learn. Among the topics covered were competition vs. cooperation, extrinsic vs. intrinsic rewards, goal structures, and anxiety in the classroom.

LOCUS OF CONTROL

Crandall, V. C. , Katkovsky, W., and Crandall, V. J. Children's beliefs in their own control of reinforcements in intellectual-academic achievement situations. Child Development. 1965, 36, 91-109. This study investigated the beliefs of elementary school and high school students with regard to intellectual-academic reinforcement responsibility. Subjects were given an intellectual-academic achievement questionnaire which contained 34 items each of which could be answered with a plus or minus achievement experience. The experiences were considered normal to children's everyday life, and the children stated their beliefs as to whether the events were caused by self or others. The article described the scale for assessment of beliefs and the results of the study. It was determined that an internal locus of control could influence motivation toward achievement performance and thus predict behavior where motivation as well as ability and acquired knowledge were to be considered.

DeCharms, R. Personal causation training in schools. Journal of Applied Social Psychology. 1972, 2, 95-113. This was a three-year longitudinal study of black elementary, inner-city, low SES, sixth- and seventh-graders whose teachers had received DeCharms training program for personal causation. The training program for teachers consisted of the following: self-study and evaluation of personal motivation; understanding of different motives such as affiliation, achievement, and power; planning and realistic goal setting; and promotion of "origin" behavior (perceived as determined by his own choosing) not "pawn" behavior (perceived as determined by external forces). Results indicated that both teachers and students showed increased motivation and academic achievement, and students' perceptions of being treated as "origins" was enhanced.

Furio, B. J. The relationship between instructor behaviors and student perceptions of control in the classroom. Resources in Education. 1987,ED 291124. Furio studied the interrelationship between instructor behavior and students' perceptions of lack of control in the classroom. He identified the classroom variables including motivation, cognition, and affect and used learned helplessness as a trait orientation to access deficits in the classroom. The subjects were undergraduates in a communication course. The students were first given two measures to determine perceived control and achievement-related attributions which identified their orientation to helplessness. They were then given two measures on perceived control and teacher learning aids (eye contact, smiling, physical stance, distance) teacher communication (versatility and assertiveness), affect and cognitive measurement and motivation measurement. It was concluded that there was a significant relationship between perception of control and motivation to learn.

Rotter, J. B. Generalized expectancies for internal vs. external control of reinforcement. Psychological monographs. 1966, 80, 1-28. Whether or not a person perceives that a reward or reinforcement comes from his own behavior or from some outside force such as chance affects his behavior. Rotter described his theory of internal/external locus of control and the research that led to his internal/external locus of control questionnaire.

Ryan, R. M., Connell, J. P., and Deci, E. L. A motivational analysis of self-determination and self-regulation in education. Research onMotivation in Education: The Classroom Milieu. Ed. C. Ames and R. E. Ames. New York: Academic Press, 1985, 13-51. The authors were concerned about recent reports and discussions on the quality of education in America and about recommendations for its improvement through stricter controls. They defined and contrasted active education (formation from within) and passive education (controlled by others) in light of recommendations for stricter controls. Research on both types of education was reviewed, and it was determined that active education was strongly linked to intrinsic motivation and passive education depended on extrinsic rewards. Different approaches to education were examined, not only with regard to achievement but to personality development, self-esteem, anxiety, and perceived autonomy.

GOAL STRUCTURE AND GOAL SETTING

Ames, C. Competitive vs. cooperative reward structures: the influence of individual and group performance factors on achievement attributions and affect. American Educational Research Journal. 1981, 18, 273-287. Social comparison and the distributing of rewards can influence how children evaluate their own achievements in the classroom and how they view the achievements of others. Fifth-and sixth-grade boys and girls worked with high- and low-level, line puzzles in either a competitive or cooperative reward system. Winning in the competitive system led to self-aggrandizement while losing in the same system led to a lower self-perception of ability. In the cooperative system children evaluated their partner the same as themselves in spite of differences. Emphasis on social comparison produced different ability attributions that interferred with optimum motivation in the lower achieving students. The low achieving students in the cooperative system judged their ability higher. It was suggested that the optimal condition for improving self-esteem was cooperation and success.

Ames, C., and Ames, R. Competitive vs. individualized goal structures: the salience of past performance information for causal attributions and affect. Journal of Educational Psychology. 1981, 73, 411-418. Fifth- and sixth-graders were given a line-puzzle test individually to establish a performance history of success or failure. The children were then placed in either an individual or competitive setting with additional line puzzles. They were later questioned regarding their performance attributions. Was success or failure due to ability, luck, effort, or task difficulty? Success or failure was attributed more to effort in the individual setting and more to luck in the competitive setting. Only in the individual setting was past performance a salient cue to positive or negative affect reactions. This study determined that a competitive environment produced non-productive attributions. In an individual setting the students seemed to believe that effort would lead to the desired outcome - positive achievement motivation.

Atkinson, J. W., and Litwin, G. H. Achievement motive and test anxiety conceived as motive to approach success and to avoid failure. Journal of Abnormal and Social Psychology. 1960, 60, 52-63. Sophomore and junior university students were tested to determine the strength of motive to achieve success, the strength of motive to avoid failure, and the tendency to set easy, moderate, or difficult goals. The final exam in a psychology course (time spent) was related to the individual difference scores of the tests (motive to achieve success and motive to avoid failure), to the goal setting game and to the scores of the exam. Results showed that the motive to succeed was stronger than the motive to avoid failure when the task was of intermediate difficulty. Students with these goals worked for a longer time on the exam and received higher scores.

Bandura, A., and Shunk, D. H. Cultivating competence, self-efficacy and intrinsic interest through proximal self-motivation. Journal of Personality and Social Psychology. This study was to determine if self-motivation through proximal goals would lead to competency, increased self-efficacy, and intrinsic motivation. Children seven to ten years old with deficits and low interest in mathematics were the subjects. The children worked independently on subskills in math. Some had proximal goals, some had distal goals, and some had no goals. Those students with proximal goals progressed more rapidly than the students with distal or no goals. They also achieved mastery which in turn increased self-efficacy and interest.

Covington, M. V. , and Omelich, C. L. Task oriented vs. competitive learning structures: motivational and performance sequences. Journal of Educational Psychology. 1984, 76, 1038-1050. The goal of this study was to determine if different learning structures would lead to different motivational orientation and performance levels. A group of undergraduate psychology students was used in the study. Students were randomly assigned to groups implementing either mastery learning (criterion referenced testing) or norm referenced testing with no retesting. The comparison of competitive and individualistic goal structures led to the following results. Performance was superior in the mastery learning groups due to retesting and criterion referenced testing. Analysis confirmed a complex interrelationship among factors such as performance, retest option, motivation, and increased learning.

Mahone, C. H. Fear of failure and unrealistic vocational aspirations. Journal of Abnormal and Social Psychology. 1960, 60, 253-261. This study tried to determine if persons fearful of failure had unrealistic career choices with respect to ability and interest. Male college students took the Thematic Aperception Test and an achievement anxiety scale. Then a vocational information questionnaire was administered. Such things as vocational objectives, estimate of ability required for objectives, estimate of own ability, vocation if ability was no limit, and which occupations most closely resembled own choice were determined. Disposition to avoid failure was also measured and an anxiety scale administered. Subjects were judged on four criteria: discrepancy between student's measured ability and ability judged to be required for vocational choice, discrepancy between subject's own ability and his estimate of ability required to reach vocational goal, inaccuracy in estimating ability, and discrepancy between interest patterns and vocational asperations. Results showed that students low in achievement motivation and high in achievement related anxiety had unrealistic goals.

SELF-ESTEEM

Andrews, G. R., and Debus, R. L. Persistence and the causal perception of failure: modifying cognitive attributions. Journal of Educational Psychology. 1978, 70, 154-167. This study had two phases. The first phase investigated the relationship between persistence at an achievement task and predisposition toward certain achievement attributions. The second phase investigated the possibility of changing these predispositions. The subjects, sixth-grade girls and boys, were given an Individual Achievement Rating, then circle-design tasks which were manipulated as to time and difficulty, and finally a perceptional-reasoning Test. Results showed a significant relation between causal attributions for failure and persistence. An attribution of failure to lack of effort was positively related to persistence while an attribution of failure to lack of ability or task difficulty was negatively related to persistence. The second phase used reinforcement procedures to influence behavior. There was strong support that causal attributions affect achievement behaviors and that training had positive results which were still effective after four months.

Covington, M. V., and Beery, R. G. Self-Worth and School Learning. New York: Holt, Rinehart and Winston, 1976. The authors combined their own research and the research findings of others to discover what motivated students in the classroom. The general motivational assumption put forth was that an individual will always act to protect his self-esteem and will avoid any ability threatening experiences even at the expense of his performance in school. Motivational strategies were suggested to reduce stress, to train students to think, to give them more control over learning, and to help them reach their potential.

Covington, M. V., and Omelich, C. L. Effort: the double edged sword in school achievement. Journal of Educational Psychology. 1979a, 71, 169-182. Self-worth theory indicates that teachers encourage students to put forth effort to succeed, but students try to save their self-esteem by not trying. This study tested these assertions. Undergraduates rated their affective reactions to hypothetical test failures under the following conditions: high effort with no self-serving excuses, little effort and no excuses, little effort with excuses, and high effort with excuses. Subjects then took the role of teachers and rated students under identical conditions. Failure after high effort with no excuses resulted in the greatest feeling of inability and negative affect. Students with low effort had fewer feelings of shame and inability. This was the condition punished the most severely by subjects acting as teachers.

Covington, M. V., and Omelich, C. It's best to be able and virtuous too: student and teacher evaluative responses to successful effort. Journal of Educational Psychology. 1979b, 71, 688-700. American society equates a person's worth with ability more than effort. Both teachers and students value effort when it leads to success. There is, however, a conflict in values when effort does not mean success, since the preferred student explanation for failure is high ability with low effort. In order to test these assertions, both male and female students answered questionnaires concerning hypothetical test performances. Four conditions of success were tested (effort and affective reactions). The subjects then took the role of teacher and rated hypothetical students under the same test conditions. Results showed that teacher praise and self-esteem were highest when success followed high effort. The combination of high effort and ability meant increased self-esteem. Students wanted to be able and motivated.

Covington, M. V. , and Omelich, C. L. As failures mount: affective and cognitive consequences of ability demolition in the classroom. Journal of Educational psychology. 1981, 73, 796-808. This study was to determine what happens when explanations that externalize the cause of ones achievement failures are no longer credible. Undergraduates in an introductory psychology course were placed in either a one test or a two test group (modified mastery learning). Tests were scored and the results were given to the students. Students then described their performances as successes or failures in terms of self-perceptions of ability. Repeated failure was especially devastating to low esteem subjects. Their vulnerability was accentuated by mastery learning since it was less plausible to blame failure on lack of effort or external factors.

Frankel, A., and Snyder, M. L. Egotism among the depressed: when self-protection becomes self-handicapping. Resources in Education. 1987, ED 289120. Frankel and Snyder made a comparison of learned helplessness and egotism as an explanation for lack of motivation. The subjects were relatively depressed or non-depressed college students whose states were determined by the Beck Depression Inventory. The subjects were given puzzles purported to be easy, moderately difficult or difficult. The goal was to discover if persistence was less (learned helplessness) or more (egotism) if the puzzle was more difficult. Results indicated that the relatively depressed students persisted more when the task was purported to be very difficult as opposed to moderately difficult. This was in comparison to their less depressed counterparts. It was determined that depressed persons will try to preserve their self-esteem when threatened with egotistic behavior.

Holloway, S. D. Concepts of ability and effort in Japan and the United States. Review of Educational Research. 1988, 58, 327-345. Research concerning concepts of ability and effort in the United States and Japan were reviewed. Whereas ability was considered the most important determinant of success in American schools, effort was considered more important in Japan. The two concepts also seemed to hold different connotations in the two countries. In America more effort indicated less ability. In Japan effort and ability were almost synonymous. Interpersonal cooperation was stressed in Japan over competition and individual performance evaluation. The teaching of rules and procedure and peer group socialization lessened the teacher's role as disciplinarian and led to a sense of responsibility in Japanese students.

Leggett, E. L., and Dweck, C. S. Children's effort/ability reasoning: individual differences and motivational consequences. Resources in Education. 1987, ED 283604. Leggett and Dweck studied the developmental and individual differences in effort and ability reasoning in thirteen- and fourteen-year-olds in order to discover their effect on motivational patterns. The subjects were given intellectual problems. The first problems led to success. The second problems led to failure. Causal attributions were then rated. Persistence was measured by a questionnaire asking which type of problem subjects would prefer in another session. Children with a positive effort/ability reasoning (high effort leading to failure indicates more effort is needed) chose a mastery learning pattern in 72% of the cases, and children with an inverse reasoning (high effort means low ability) chose in 61% of the cases to cease working on difficult problems. Results indicated that when adolescents make judgments about their own achievement, different motivational consequences (helpless or mastery) occur.

Lillemyr, O. Achievement motivation as a factor in self-perceptions. Resources in Education. 1983, ED 237418. Three questions were investigated to determine whether achievement motivation was important in self-perceptions, whether a student's self-perception acted as a foundation for achievement motivation, and whether achievement motivation and self-perceptions were significant in determining motivational interest groups in music (instruments, vocal, etc.). Fourth-grade boys and girls in eight schools in Norway were the subjects. The variables were measured with four different instruments covering self-perception (cognitive, social, physical, musical, and general self-esteem), perceived competence including the musical aspect of this construct, motivation variables (motive to succeed and motive to avoid failure), and interest in school music. Intercorrelations showed that achievement motivation was important in self-perception. It was partly confirmed that self-perception acts as a foundation for achievement motivation, and it was partly confirmed that self-perception and the two achievement motives contributed to students' interest in school music.

Phillips, D. The illusion of incompetence among academically competent children. Child Development. 1984, 55, 2000-2016. In order to assess the relationship between children's beliefs in their academic competence and their achievement orientations, fifth-graders who had scored above the 75th percentile on the SRA Achievement Tests were given a battery of questionnaires concerning their motivational constructs. Out of the 117, twenty-three had low perceptions of competence despite SRA scores and classroom achievement. When compared to children whose perceptions equaled their abilities, the children with an illusion of incompetence had lower achievement standards, believed that their teachers had lower expectancies for them, and attributed their successes more to effort than to ability. They were also considered less persistent by their teachers.

Weiner, B. Theories of Motivation from Mechanism to Cognition. Chicago: Rand McNally Publishing Company, 1972. Dr. Weiner described his book, "This book is a review of four theories of motivation. The theories and their major contributors are drive theory (Clark Hull, Kenneth Spence), field theory (Kurt Lewin), achievement theory (David McClellend, John Atkinson), and attribution theory (Fritz Heider). Each theory is examined form a historical viewpoint, with the presentation of conceptual development as new empirical facts and theoretical ideas emerged (xiii)."

ATTRIBUTION RETRAINING

Anderson, C. A., and Jennings, D. L. When experiences of failure promote expectations of success: the impact of attributing failure to ineffective strategies. Journal of Personality. 1980, 48, 393-407. This was a study of persuasion techniques. Subjects were asked to make phone calls for Red Cross blood donations. The first call failed and a brain-washing technique explaining that success was due either to ability or strategy was used. Those that attributed success to strategy still hoped for success on future calls compared to the control group with no attribution manipulation. Those that attributed success to ability did not consider strategy. It was determined that people's expectations are important in deciding whether or not to attempt a task, for how long, and how hard to persist. The above findings were applied to learned helplessness.

Dweck, C. S. The role of expectations and attributions in the alleviation of learned helplessness. The Journal of Personality and Social Psychology. 1975, 31, 674-685. It was assumed that the way in which a child views an adverse event such as failing determines how s/he reacts to the event. The purpose of the study was to determine if attribution retraining would change the way children deal with failure. Twelve extremely helpless children, 8 to 13, were compared to their persistent classmates. Two groups were formed. One group had many successes in a problem-solving situation and a few failures which were ignored or glossed over. The other group had the same number of successes, but the failures were attributed to lack of effort. After the attribution retraining, children were able to persist and succeed. They actually showed superior performance. Those in the success-only group showed no improved effort after failure. Some showed marked impairment.

Frieze, I. H., and Snyder, H. N. Children's beliefs about the causes of success or failure in school settings. Journal of Educational Psychology. 1980, 72, 186-196. Frieze and Snyder investigated whether causal explanations for success or failure were the same for testing as for other types of achievement tasks in school. First-, third-, and fifth-graders were interviewed using stories and pictures to determine if outcomes were due to stable, unstable, internal or external factors. The four achievement tasks were a test, an art project, playing football, and catching frogs. Results showed that children do not use the same type of causal explanation for all situations. Since beliefs were situation specific, children could be taught to use productive, beneficial, and realistic schemata for any situation.

Kolb, D. A. Achievement motivation training for underachieving boys. Journal of Personality and Social Psychology. 1965, 2, 783-792. Underachieving boys were placed in a university setting which simulated university courses and instruction. All the boys had IQ's of 120 or over and were receiving grades of "C"or less. Some were to experience college living with exciting role models, and the rest took part in the academic program only. The program was designed to teach the characteristics of a high-achiever in an academic program. A six month follow-up showed no significant difference, but after a year and a half the boys who had the role model had improved significantly over the control group. The study indicated that teaching underachieving boys the characteristics of high-achievers can lead to better performance.

Moss, H. A. and Kagan, J. Stability of achievement and recognition-seeking behaviors from early childhood through adulthood. Journal of Abnormal and Social Psychology. 1961, 62, 504-513. A longitudinal study of males and females was conducted to test the assumption that achievement and recognition-seeking behaviors are established at an early age. Achievement behavior was determined by persistence in challanging intellectual, mechanical, and athletic tasks, and recognition-seeking behaviors were related to grades, honors, status, leadership, and material goods. Mothers' attitudes and behaviors toward achievement were also a part of the study. Results indicated that both achievement and recognition-seeking behaviors between the ages of six and ten had a significant correlation to these behaviors during adulthood. Intellectual activities between the ages of ten and fourteen had a high positive correlation to the same type of activities in adulthood. Maternal acceleration between six and ten was moderately correlated to behaviors of both men and women. It was determined that achievement strivings in grades one through four were a moderately good index of future behaviors.

SUMMARY

STUDENT/TEACHER INTERACTION - CLASSROOM CLIMATE

According to Sadker (1973, P. 441), learning is defined as an individual interacting with the environment. He considered his study to be an initial step to understanding the learning process and therefore important in motivation to learn. He identified and measured the dimensions of the elementary school environment and determined that these dimensions can be identified and measured. Such topics as humanism, autonomy, morale, opportunism, and resources were covered.

Napier & Riley (1985) studied the relationship between affective determinants and achievement. They examined the significance of student choice, teacher support, teacher enthusiasm, and usefulness of the class material in student motivation. Results showed that all of these factors were significant, but the most important affective determinants leading to motivation and achievement were the following: 1) teacher encouraged extracurricular course work which was not too difficult, 2) students were comfortable and happy in class, 3) teacher avoided too much latitude in student choice of topics, sequencing, mode of learning, rate of learning, and timing of tests, 4) teacher encouraged opinions, thinking for self, and creativity, 5) teacher took a personal interest in students. The results of a study by Corno & Mandinach (1983) also showed that the nature of the class group influenced students' relationships to each other as well as individual student's ability, attributions, and self-esteem.

The relationship of anxiety states to performance and learning was studied by Mandler & Sarason (1952). Although scores of low anxiety subjects were better at first, as learning proceeded, the high anxiety drive of the high anxiety subjects improved their performance. The study showed that anxiety was an important variable in a testing situation but was in disagreement with Napier & Riley's findings that students should be comfortable and happy.

A teacher's projected attitude is part of the classroom environment and can influence motivation (Grossnickle & Thiel, 1988, p. 5). The Meyer (1982) study gave an interesting insight into teacher behaviors intended to be positive but perceived by students as teacher negative beliefs in their ability. It might be assumed that ignoring or being angry with a student would be negative affect; often, however, it had the opposite effect. When a student was ignored or when the teacher was angry over poor performance, the student perceived high ability. Pity, understanding, or unrequested helping behavior with regard to poor performance as well as praise for success on an easy task were also perceived as negative feedback.

The study by Brophy, et al. (1983) is another example of students perceiving teacher attitudes and explanations differently than expected. This study of the relationship between teacher presentation of a task and student engagement in the task indicated that student engagement was actually higher with no presentation statement. Positive statements showed no tendency for increased student engagement; negative statements did, however, show lower student engagement. A possible explanation for these

findings was that students became suspicious of task difficulty and reacted negatively when teachers tried to motivate them.

Not only teacher attitudes but also student attitudes can affect classroom climate (Wlodkowski, 1986, p.36). Richards, Gaver, & Golicz (1984, 1986) assumed that children whose performance was below that predicted by standardized tests would have poorer attitudes toward school subjects. Their study not only supported their assumption but also determined that extreme over and underachievers also had poor attitudes. Their second study in 1986 focusing on whether or not an apathetic attitude and lack of interest in school subjects would lead to low achievement can be compared to their 1984 study. Results of the second study indicated that underachievers did have a negative attitude, whereas overachievers had a positive attitude. It was believed that the difference in the results of the two studies was probably due to demographic makeup.

How teachers view intelligence can also influence classroom atmosphere. Teachers with an entity view of intelligence tended to interact differently with students than teachers with an incremental view of intelligence. Entity view teachers were inclined to use competitive goals, and students tended to focus on how they performed in relation to others. These teachers often grouped children and protected low ability children from failure by giving easier tasks and supplying answers. Incremental view teachers tended to individualize, provide challenges, and encourage learning from mistakes (Dweck, 1986).

EXTRINSIC VS. INTRINSIC REWARDS

Reinforcement theory has been and still is applied to classroom learning today. Teachers find that the promise of a reward or the threat of punishment can influence the behavior of their students (Stipek, 1988, p. 28). Masters, Furmen, & Barden (1977) wanted to determine what effect tangible rewards and self-dispensed achievement evaluations had on learning and found that self-dispensed rewards led to more rapid mastery.

Teacher praise and comments were studied by Hammer (1972), Brophy (1981), Mandler & Sarason (1952), and Clair & Snyder (1979). Both the Clair & Snyder study and the Hammer study experienced increased performance from students after positive evaluative feedback. Mandler & Sarason found that an intervening report during a testing situation improved performance for low-anxiety students only. Brophy also concluded that praise was a valuable reinforcer but had other functions since students responded differently to praise and often perceived meanings other than what was intended.

Brophy (1983) discussed a different way of seeing motivation based on a student's reason for learning. His "Motivation to Learn" was divided into four categories: task exogenous/performance focused based on the use of rewards and incentives, task exogenous/value focused based on some goal beyond school, task endogenous/performance focused based on pride of mastering a skill, and task endogenous/value focused based on the joy of learning something new. In the first category, task exogenous/performance focused, the objective is not learning but receiving a reward. The second category, task exogenous/performance focused, is still based on receiving a reward, but the child looks ahead to his future and tries to develop a

useful skill. Task endogenous/performance focused is the first motivational strategy that finds value in learning and self-improvement. Task endogenous/value focused is truly intrinsic motivation - learning for the joy of learning even though there is no obvious practical purpose.

Intrinsic motivation, as described by Csikszentmihalyi (1982), is a type of flow experience that occurs when ones skills are equal to the challenge of the action (1982). His earlier study (1980) determined that people who perceived challenges and skills as balanced reported a high level of optimal or "flow" experience. The importance of "flow" experience lies in the fact that what is most important to each individual is how he feels more than what he does.

Two studies investigated the effect of undertaking activities as games or intrinsically pleasurable activities. Lepper & Gilovich (1982) investigated the conseqences of undertaking mundane activities as games rather than chores and found children to be more in compliance with and to receive more enjoyment from a task when it was perceived as a game. Nuttin's (1973) study had certain similarities since he too was interested in the pleasure aspect of the task as well as the aspect of control. Children who perceived themselves in control of the results of their activities received more pleasure and persisted more.

LOCUS OF CONTROL

Ryan, Connell, & Deci (1985) were concerned about recent reports and discussions on the quality of education in America and about recommendations

for its improvement through stricter controls. They defined and contrasted active education (formation from within) and passive education (controlled by others) in the light of recommendations for stricter controls. Their determination was that active education was strongly linked to intrinsic motivation and passive education depended on extrinsic rewards.

Rotter (1966) developed a locus of control model which stated that individuals who believe in their academic competence also believe that they have control over academic outcomes. They have confidence that their efforts will led to success (1966).

Crandall, Katkovsky, & Crandall studied high school students beliefs with regard to intellectual-academic reinforcement responsibility and determined that an internal locus of control influenced motivation toward achievement. Nuttin's 1973 study indicated that children strongly preferred being in control of learning. It led them to more self-attributions and increased self-esteem.

Both Furio (1987) and Cooper (1979) studied the interrelationships between students' perceptions of lack of control in the classroom and instructor behaviors. Furio concentrated on physical acts such as eye contact, smiling, physical stance, and distance. His goal was to demonstrate the behavioral effects of uncontrol and helplessness in order to identify the role of these variables in determining student perceptions of lack of control and to find out if students' perceptions of control were related to motivation and learning. Results indicated that there was a significant relationship between the two. He stated that as lack of control increased, cognitive motivation and positive affective behaviors decreased.

Cooper, on the other hand, developed a model which showed a circular relationship between teacher expectations and student achievement. Differential feedback treatment of low-achievers led them to believe they had less control over success. The result was more learned helplessness.

DeCharms (1972) made a three year longitudinal study of students whose teachers had received his training program for personal causation. This program consisted of the following: self study and evaluation of personal motivation; understanding of different motives such as affiliation, achievement and power; planning and realistic goal setting; and promotion of "origin" behavior not "pawn" behavior (see glossary). Results showed that both teachers and students had increased motivation and academic achievement and that students' perceptions of being treated as "origins" was enhanced.

GOAL STRUCTURE AND GOAL SETTING

Studies by Masters, Furman, & Barden (1977) and Lepper & Gilovich (1982) indicated that standards were primary in learning and motivation. In an achievement context, individuals are motivated to obtain certain goals. These goals are different for different people. Some individuals want to outperform others; some want to please their parents, teachers, or peers; some enjoy the reward of a challenge; and some perform for a tangible reward. The most ideal goal, of course, is to develop understanding for the sake of simply knowing more (Stipek, 1988, p. 10).

Referring again to Dweck's study (1986), a child's view of intelligence led to the pursuit of particular goals which in turn influenced how well s/he acquired new knowledge, how well existing knowledge was used, and how

well new skills and knowledge were transferred to new situations. A child with an entity view had a performance goal orientation (goal to gain positive judgments and avoid negative judgments of competence) and a child with a incremental view had a learning goal orientation (goal to increase competence).

Several different goal structures were studied by Ames (1981), Ames & Ames (1981), Bandura & Shunk (1981), and Covington & Omelich (1984). Bandura & Shunk studied and determined the advantage of proximal goals over distal goals. The other authors found that an emphasis on cooperative and individual rather than competitive goals improved not only learning but self-esteem and led to more positive achievement motivation.

Atkinson and Litwin (1960) studied students' motives to succeed and motives to avoid failure with regard to goals. Results showed that the motive to succeed was stronger when goals were of intermediate difficulty. Mahone (1960) discovered that students low in achievement motivation and high in achievement related anxiety had unrealistically high or low goals providing them with excuses for failure.

Children need to be responsible for their own behavior and achievement. When children set their own goals, each student's locus of control becomes internalized and learning is enhanced. Children need to be helped to think about their behavior and to be responsible for their successes and non-successes (Wlodkowski, P. 142-5). Our schools give students little input as to the goals set for them and little input into what strategies are used and to how fast they must learn (Ryan, et al.,1985 pp. 30-31).

SELF-ESTEEM

A general motivational assumption put forth by Covington & Beery was that an individual will always act to protect his self-esteem and will avoid any ability threatening experiences even at the expense of his performance in school (1976, p.9). Lillemyr's (1987) study as to whether self-perceptions were an important factor in achievement motivation agreed with Covington & Beery and further confirmed that self-perception acts as a foundation for achievement motivation and contributed to a student's interest in school.

Frankel & Snyder (1987) made a comparison of learned helplessness (less Persistence) and egotism (more persistence) as an explanation for lack of motivation. They also determined that depressed persons will try to preserve their self-esteem when threatened with egotistic behavior.

Self-worth theory indicates that teachers encourage students to put forth effort to succeed, but that students try to save their self-esteem by not trying. Covington & Omelich (1979a,b) conducted two studies. One indicated that failure after high effort with no self-serving excuses resulted in the greatest feeling of inability and negative affect in students; the other indicated that there was a conflict of interest between student and teacher when effort did not lead to success. Both teachers and students valued effort when it led to success. Without success the preferred student explanation for failure was high ability with low effort. A third study by Covington & Omelich (1981) stated that mastery learning was especially devastating to low esteem students since it was less plausible to blame failure on lack of effort or other external factors.

Phillips (1984) studied the relationship between children's beliefs in their academic competence and their achievement orientations and found that children with an illusion of incompetence had lower achievement standards, believed that their teachers had lower expectancies for them, and attributed their successes more to effort than to ability.

Ames (1981) and Bandura and Shunk (1981) indicated from their studies that goals leading to success influenced a child's self-esteem. Cooperative and proximal goals increased feelings of self-worth.

Perceptions of ability are important in determining student motivation. According to Atkinson's theory of achievement motivation, the probability of being successful at a task as determined by an individual will be an important factor in deciding whether or not he will approach the task. Those who believe that they lack the ability will be less likely to try (Weiner, 1972, p. 195).

Weiner's theory said that individuals who believe in their competence will attribute their success to ability and their failures to outside causes. Those who lack faith in their competence will attribute failure to lack of ability and success to some outside cause (Stipek, 1988, pp. 83-4).

Andrews & Debus (1978) investigated the relationship between persistence at an achievement task and the predisposition toward certain achievement attributions. Their study showed a significant relation between causal attributions for failure and persistence. An attribution of failure to lack of effort was positively related to persistence while an attribution of failure to lack of ability or task difficulty was negatively related to persistence.

Leggett & Dweck (1987) studied the developmental and individual differences in effort and ability reasoning in young teenagers in order to discover their effect on motivational patterns. Children with a positive effort/ability reasoning (high effort leading to failure indicates more effort needed - no reflection on ability) chose a mastery pattern of learning; while children with an inverse effort/ability reasoning (high effort means low ability) chose to cease working on difficult problems.

Holloway (1988) researched concepts of ability and effort in the United States and Japan. Whereas ability was considered the most important determinant of success in American schools, effort was more important in Japan. The two concepts held different connotations in the two countries. In the United States more effort indicated less ability. In Japan effort and ability were almost synonymous.

ATTRIBUTION RETRAINING

A number of researchers have studied the possibility of attribution retraining. Frieze & Snyder (1980) indicated that causal explanations for success or failure were situation specific; therefore, children can be taught to use productive, beneficial, and realistic schemata for any situation. According to Moss & Kagan (1961) attribution training should begin very early. Their longitudinal study determined that achievement and recognition behaviors are established at an early age. The second phase of the Andrews & Debus study used certain effort reinforcements to influence behavior. This training had positive results and was still effective after four months.

Dweck (1975), Kolb (1965), and Anderson & Jennings (1980) all made studies of attribution retraining. Dweck used success/failure situations where failure was either ignored or attributed to lack of effort by the experimenter. After retraining her group was able to persist and succeed. Kolb put underachieving boys in an achieving situation with high-achievers as models. This also led to better performance. Anderson & Jennings used persuasion techniques to convince subjects that failure was due to lack of strategy rather than ability.

CONCLUSIONS

Classroom climate and teacher interaction with students is crucial in creating the needed socio-emotional climate to help maximize student achievement and motivation. Teachers need to create a non-threatening environment that promotes positive attitudes and feelings which focus on mutual trust and respect. They need to value each student as an individual and to encourage students to develop a feeling of positive self-worth. Teachers should project a warm, caring, fair image to students using techniques and strategies that enhance student motivation. An incremental view of intelligence and an awareness of students perceptions of teacher behaviors is also important.

Reinforcers may be used to facilitate learning and motivation. Research shows, however, that learning is enhanced if the motivation is internal. A reward system that moves students toward intrinsic motivation is important. Classroom games and feedback that builds self-esteem and that is based on honest performance, effort, and improvement can increase

motivation. Teachers should be aware of the fact that feedback can be wrongly interpreted.

Cooperative, competitive and individualistic goal structures all affect motivation. Appropriate goal structures need to be implemented. Cooperative and individualistic goals are more likely to increase motivation since they decrease interpersonal competition and increase intrapersonal competition. Individualistic goal structures help children to be responsible for their own behavior and achievement.

Students need to be helped to set realistic proximal and distal goals that bring about meaningful successes. When children set their own goals and have input regarding the criteria of their evaluation, their locus of control is internalized and learning is enhanced. Appropriate goal setting stimulates achievement striving.

self-esteem seems to encompass practically all of the factors of motivation to learn. School can be a threatening environment that may undermine a student's self-esteem. Classroom climate, student/teacher interactions,a goal strategies, perceptions of control, and causal attributions can either increase or lower a student's self-esteem. A student's perception of his ability is important in motivation. Models presented by some of the major theorists of motivation all indicate that individuals who believe in their competence will be more persistent, have an internal locus of control, and attribute their successes to ability and their failures to lack of effort.

Attribution retraining by emphasizing a student's personal causation in learning should be a major objective in motivation. A person who feel in

control of his own fate and who assumes responsibility for his learning is a positively motivated , confident learner. He attributes his successes and failures to effort and ability rather than to external forces.

RECOMMENDED STRATEGIES FOR PROMOTING MOTIVATION TO LEARN

I. Student/teacher interactions - classroom climate.

A. Take a personal interest in students.

B. Use topics of student interest and choice whenever possible.

C. Try to determine attitudes and anxieties.

D. Be aware of how praise and behaviors can lead to false impressions.

E. Have an incremental view of intelligence and instill this belief in students.

F. Make learning fun whenever possible and apply it to real life.

G. Create an atmosphere of caring and trust.

II. Extrinsic vs. intrinsic rewards.

A. Model enthusiasm for subject matter.

B. Individualize teaching strategies whenever possible.

C. Make students aware of individual progress.

D. Explain how class materials pertain to life in the real world.

E. Allow students as many choices as possible.

F. Encourage students to compare present accomplishments with their own past performance rather than peer accomplishments.

G. Use external rewards as a pathway to internal rewards.

H. Help students accept their mistakes as a part of the learning process.

I. Provide intrinsically motivating learning activities such as games.

III. Goal structure and goal setting.

A. Use cooperative and individualistic goal structures.

B. Place students in situations in which groups cannot succeed unless all participate.

C. Use group participation as part of the evaluation process.

D. Avoid student comparison in the classroom.

E. Offer additional credit for correcting mistakes.

F. Allow for mastery learning, but be aware of the problems which low-achievers might have with this type of learning.

G. Provide class time for goal formation.

H. Determine students' progress, strengths, and weaknesses before goal setting.

I. Discuss and evaluate obstables that must be overcome to complete goals.

IV. Locus of Control.

A. Promote orgin behavior by giving choices.

B. Praise and value effort.

C. Value student opinions and suggestions.

D. Avoid differential treatment of low- and high-achievers.

E. Avoid authoritarian behavior.

F. Make sure that praise is evaluative for all students.

V. Self-esteem enhancement.

A. Make an effort to get to know each student.

B. Survey students' interests.

C. Model and verbalize self-acceptance.

D. React positively to successes and neutrally to failures.

E. Involve all students in decision-making and problem-solving.

F. Communicate concern for students.

G. Use small group learning strategies to encourage students to know and accept one another.

H. Introduce units with manageable tasks to increase confidence. and stimulate interest.

I. Provide responsible and constructive positive and negative feedback.

J. Give students time to arrive at their own solutions to problems.

VI. Attribution retraining.

A. Reward effort and equate effort with ability.

B. Teach students to view mistakes as learning tools not as lack of ability.

C. Emphasize student improvement as evidence of incremental intelligence.

D. Have students write realistic goals and explain what it takes to meet these goals.

E. Examine mistakes through class discussion to explore possible causes.

GLOSSARY

causal attributions - perceptions of the cause of achievement outcome (Stipek, 81)

classroom climate - quality of the interrelationships among members of a learning group (Wlodkowski, 121).

distal goals - long term goals.

entity view of intelligence - ability is a stable, global trait (Stipek, 92).

extrinsic rewards - material rewards or those that are given in a rather public manner (Clifford, 688).

feedback - information given to a performer about the quality or accuracy of his or her performance (Clifford, 691).

high-achiever - a person with a need to succeed that is stronger than the need to avoid failure (Clifford, 689).

incremental view of intelligence - intelligence consists of an ever expanding repertoire of skills and knowledge (Dweck & Bempechat in Stipek,92).

interpersonal - between persons; requiring or seeking contact with other people (Barnhart, 1094).

intrapersonal - within ones self (Barnhart, 1098).

intrinsic motivation - engaging in behavior that is associated with internalized values rather than characteristics of the task (Stipek, 44).

intrinsic rewards - nonmaterial rewards like the feeling of personal satisfaction one experiences after reaching a goal (Clifford, 690).

learned helplessness - a tendency to attribute failure to uncontrollable factors, which in turn prompts one to give up readily or avoid attempting a task (Clifford, 690).

locus of control - beliefs regarding the contingency of reinforcement, either internal (contingent on ones own behavior or permanent personal characteristics) or external (contingent on factors beyond an individual's control) (Stipek, 78).

low-achiever - a person with a need to avoid failure that is stronger than the need to succeed (Clifford, 691).

mastery learning model - nearly all students can learn the basic school curriculum, but some take longer than others (Stipek, 129).

motive to avoid failure - factor directing individuals away from achievement tasks (Stipek, 76).

motive to succeed - factor directs individuals toward achievement tasks (Stipek, 76).

origin - a person who perceives his behavior as determined by his/her own choosing (Stipek, 70).

overachiever - accomplishes a great deal because s/he is afraid to fail - not motivated to succeed (Covington & Beery, 5).

pawn - a person who perceives his behavior as determined by external forces (Stipek, 70).

proximal goals - short term goals.

schemata - physical and mental structures or skills which a person uses to experience new events and acquire other schemata (Clifford, 696).

self-worth - individual's appraisal of his or her own value (Stipek, 95).

Thematic Aperception Test - instrument of personality assessment originated by Henry Murray (Weiner, 172).

underachiever - student who does not engage in the type of learning activities that maximize learning (Stipek, 4).

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